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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,391	07/26/2001	Neil John Hursey	550-250	5033

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EXAMINER

HENNING, MATTHEW T

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,391

Applicant(s)

HURSEY ET AL.

Examiner

Matthew T. Henning

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2005.
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-12, 14-20 and 22-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-4, 6-12, 14-20 and 22-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 31 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

This action is in response to the communication filed on 3/7/2005.

DETAILED ACTION

1. Claims 1-4, 6-12, 14-20, and 22-24 have been examined. Claims 5, 13, and 21 have been cancelled.

2. All objections and rejections not set forth below have been withdrawn.

Title

3. The title of the invention is acceptable.

Priority

4. No claim for priority has been made for this application.

5. The effective filing date for the subject matter defined in the pending claims in this application is 07/26/2001.

Drawings

6. The drawings filed on 7/31/2002 are acceptable for examination proceedings.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 6, 14, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 6, 14, and 22 all depend from canceled claims 5, 13, and 21 respectively. Therefore, the ordinary person skilled in the art would be unable to determine the scope of these claims. Because claims 5, 13, and 21 are now part of dependant

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claims 1, 9, and 17, the examiner will assume that claims 6, 14, and 22 were meant to depend from the independent claims respectively.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-3, 5, 7, 9-11, 13, 15, 17-19, 21, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Marsh (US Patent Number 6,763,462).

11. Regarding claims 1, 9, and 17, Marsh disclosed a method, apparatus, and program (See Marsh Claims) operable to control an e-mail client computer to detect e-mail propagated malware (See Marsh Abstract), comprising: e-mail generating logic operable to generate an e-mail message (See Marsh Col. 2 Lines 11-25); comparison logic operable to compare said e-mail message with at least one of an address book of a sender of said e-mail message (See Marsh Col. 1 Lines 61-64 and Col. 2 Lines 44-46) and one or more previously generated e-mail messages from said client computer (See Marsh Col. 3 Lines 62-65); and identifying logic operable to identify said e-mail message as potentially containing malware if at least one of: (i) said e-mail message is being sent to more than a threshold number of addressees specified within said

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address book (See Marsh Col. 1 Lines 61-64 and Col. 2 Lines 44-46, and Col. 3 Lines 13-34); (ii) said e-mail message contains message content having at least a threshold level of similarity to message content of said previously generated e-mail messages being sent to more than a threshold number of addressees specified within said address book; and (iii) said e-mail message contains message content having at least a threshold level of similarity to message content of more than a threshold number of said previously generated e-mail messages, and quarantine queue logic operable to hold said previously generated e-mail messages in a quarantine queue for at least a predetermined quarantine period prior to being sent from said client computer (See Marsh Col. 3 paragraphs 2-4 wherein Marsh disclosed comparing outgoing messages for a certain period of time, two minutes, and if the threshold was reached during that time, the message was deleted and not sent, which implied that the message was held for the specified period of time before being sent).

12. Regarding claims 2, 10, and 18, Marsh disclosed that wherein said e-mail message specifies a plurality of addressees, said comparison logic being operable to compare said plurality of addressees with said e-mail address book to determine if said at least a threshold number of addressees has been exceeded (See Marsh Col. 2 Lines 39-46 and Col. 3 Lines 15-34).

13. Regarding claims 3, 11, and 19, Marsh disclosed that said at least a threshold number of addressees is specified as a proportion of addressees within said address book (See Marsh Col. 2 Lines 58-61).

14. Regarding claims 7, 15, and 23, Marsh disclosed confirmation input logic operable when said e-mail message is identified as potentially containing malware to generate a user message

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seeking a confirmation input from a user of said client computer before said e-mail message is sent (See Marsh Col. 3 Lines 35-43).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 4, 6, 12, 14, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh as applied to claims 1, 9, and 17 above, and further in view of Bates et al. (US Patent Number 6,785,732) hereinafter referred to as Bates.

Marsh disclosed both a proportion of addresses (See rejection of claim 3 above) and a specified time period (See rejection of claim 7 above) but failed to disclose the proportion and the time period could be user specified.

Bates teaches that in a virus checker, a users can specify preferences about the virus checking (See Bates Col. 8 Lines 49).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Bates in the virus detector of Marsh by allowing the user to specify the proportion and the time period used for determining a threat. This would have been obvious because the ordinary person skilled in the art would have been motivated to allow the user of the virus checker to specify how the checker would operate.

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17. Claims 8, 16, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh as applied to claims 1, 9, and 17 above, and further in view of Kouznetsov (US Patent Number 6,725,377).

Marsh disclosed sending alert an alert to a user upon detection of possible virus activity (See Col. 3 Lines 18-22), but failed to disclose sending an alert to an administrator upon detection of possible virus activity.

Kouznetsov teaches that in computer intrusion detection systems, when attack characteristics are detected, it is typical to notify an administrator of the detection (See Kouznetsov Col. 1 Paragraph 6).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Kouznetsov in the virus detection system of Marsh by alerting an administrator of detected possible virus activity. This would have been obvious because the ordinary person skilled in the art would have been motivated to provide the administrator with the knowledge of the possible attack in order for the administrator to take appropriate action.

Response to Arguments

18. Applicant's arguments filed 3/7/2005 have been fully considered but they are not persuasive. Applicant's argue primarily that:

- i. Marsh did not disclose holding previously generated email messages in a queue for a predetermined period of time prior to being sent from the client computer.

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- ii. The messages of Marsh are sent prior to comparison and therefore are not held.

19. Regarding applicant's argument i., that Marsh did not disclose holding previously generated email messages in a queue for a predetermined period of time prior to being sent from the client computer, with respect to claims 1, 9, and 17, the examiner does not find the argument persuasive. In Col. 3 of Marsh, Marsh discusses how outgoing email is checked for virus activity. As can be seen from Col. 3 Lines 50-65, sent messages are checked for two minutes, during which the message recipients are compared in order to determine virus like activity. If virus like activity was detected "the user would again have the options described above regarding the disposition of an outgoing message" via a virus warning (See Marsh Col. 3 Lines 54-59). These options are described by Marsh in Col. 3 Paragraph 2 wherein the options include, "deleting an outgoing message without sending, saving an outgoing message for later examination, or disregarding the warning and sending an outgoing message".

20. In order for the message to have been deleted without sending, it was inherent that the message had not been sent prior to the warning. This is because once the message was sent, it could not have been deleted without sending. Further, in order for the message to have issued a warning it must have been compared during the two minute time window disclosed by Marsh. Marsh further disclosed that in the event that no virus activity was detected, the message would be delivered according to normal operations of the e-mail application (See Marsh Col. 3 Lines 18-24).

21. It was inherent that in the system of Marsh, the messages were held in a queue until either the system deemed them to be virus free or until they were deemed to be suspicious at which

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point the user could decide to send or not send the message. This is due to the fact that there is no way that the message could have been sent and then the user given at a later point in time the option to not send the message. The only way to give the user the option, after a time period of up to two minutes after the message was deemed "outgoing", to not send a message was to have not sent it in the first place, but instead to have stored the message. This storing constitutes a queue. Further, the message was stored in the queue prior to sending for a predetermined time period, two minutes in the example given by Marsh in Col. 3 Paragraph 4, prior to sending the message. Therefore, the examiner does not find the applicant's argument persuasive.

22. Regarding applicant's argument ii. that the messages of Marsh were sent prior to comparison and therefore are not held, has been considered, but the examiner does not find the argument persuasive. This is by the same reasoning of the previous paragraph. Further, Marsh clearly disclosed not sending the messages until they were deemed virus free (See Marsh Col. 3 Lines 18-24), and that one way to do so was to monitor the messages sent over the past predetermined time period (See Marsh Col. 3 Paragraph 4). Therefore, the examiner does not find the applicant's argument persuasive.

23. As such, the examiner has maintained the rejection of claims 1, 9, and 17 as set forth above. The examiner also maintains the rejections of the claims which depend from them, claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24, for the same reasons.

24. The examiner would like to note that the new prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Galea (US Patent Application Publication 2002/0004908) disclosed a system in which electronic mail was placed in a queue to be scanned prior to sending the message.

- b. Gartside (US Patent Number 6,851,058) disclosed that e-mail messages are placed in a queue in order to be scanned.

Conclusion

- 25. Claims 1-4, 6-12, 14-20, and 22-24 have been rejected.
- 26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - c. Shipp (Patent Application Publication Number 2004/0054498) disclosed a method for detecting a virus outbreak by monitoring e-mail traffic patterns, including monitoring for duplicate or similar messages being sent in a specified period of time.
 - d. Hockey (Patent Application Publication Number 2004/0064515) disclosed a method for detecting denial of service attacks, worms, and spam by monitoring for duplicate messages using message digests.
 - e. Algomy et al. (Patent Application publication Number 2002/0194489) disclosed a method for containing viruses including monitoring for messages being sent to decoy addresses in an address book.
 - f. Milliken et al. (Patent Application Publication Number 2004/0073617) disclosed a method for monitoring e-mail for virus activity involving checking for replicated content.
- 27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**


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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew T. Henning whose telephone number is (571) 272-3790. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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5/16/2005


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